



Extreme Marshmallow Cannon

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TOOLS:

- [Hack saw \(1\)](#)



PARTS:

- [8oz PVC Cement Red Hot Low Voc \(1\)](#)
- [Pressure Gauge 0-100 PSI \(1\)](#)
- [Electronic Sprinkler Valve \(1\)](#)
- [9V Battery \(2\) \(1\)](#)
- [Switch \(1\)](#)
- [Wire \(1\)](#)
- [Bike Tire Valve \(1\)](#)
- [Marshmallows \(1\)](#)
- [Altoids Box \(1\)](#)
- [PVC Tape \(1\)](#)
- [PB110 1/2" x 1/4" Brass Pipe Bushing \(1\)](#)
- [PB101 1/4" Brass Pipe Tee \(1\)](#)
- [PB113 1/4" Close Brass Pipe Nipple \(1\)](#)
- [PVC 1 1/2" EL 90D EL \(4\) \(1\)](#)
- [PVC 3/4" EL 90D EL \(1\)](#)
- [PVC 1" x 1" x 3/4" Tee \(1\)](#)
- [PVC 3/4" x 3/4" Tee \(2\) \(1\)](#)
- [PVC 1-1/2" x 1 1/2 x 1" Tee \(2\) \(1\)](#)

- [PVC 1 1/2" x 1 1/2" x 1 1/2" Tee \(1\)](#)
- [PVC 1-1/2" Cross \(1\)](#)
- [PVC 3/4" Running Trap \(2\) \(1\)](#)
- [PVC 1" Male Adapter \(2\) \(1\)](#)
- [PVC 1" x 3/4" Bushing \(2\) \(1\)](#)
- [PVC 1-1/2" x 1" Bushing \(1\)](#)
- [PVC 3/4" x 1/2" Bushing \(1\)](#)
- [PVC Marshmallow Barrell \(1\)](#)
- [PVC 1 1/2" x 12" \(2\) \(1\)](#)
- [PVC 1 1/2" x 10" \(1\)](#)
- [PVC 1 1/2" x 6 1/2" \(1\)](#)
- [PVC 1 1/2" x 2 1/2" \(4\) \(1\)](#)
- [PVC 1 1/2" x 3 7/8" \(1\) \(1\)](#)
- [PVC 3/4" x 1 1/2" \(3\) \(1\)](#)
- [PVC 1" x 2 1/2" \(1\) \(1\)](#)
- [PVC 1" x 2" \(1\) \(1\)](#)

SUMMARY

This project will take about 8 hours. It doesn't need to be done all in one sitting. Enjoy and take your time.

Step 1 — Extreme Marshmallow Cannon



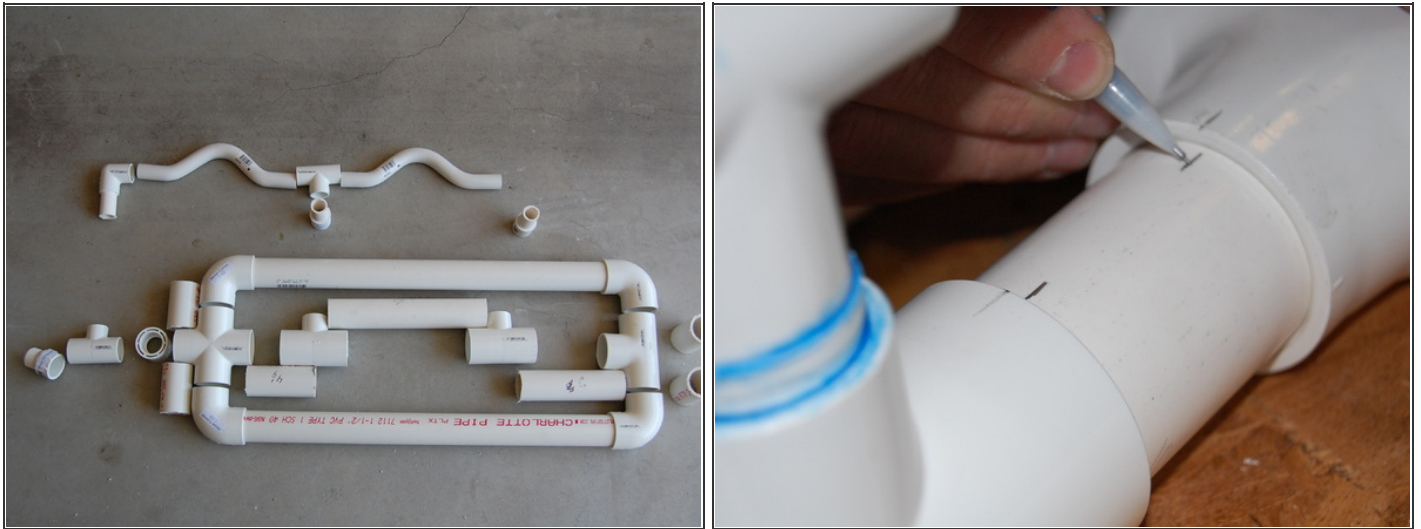
- Parts
- Make sure you have everything you need.
- Cut pieces are not pictured. You will cut these yourself.
- PVC pipe joints need to be twisted when gluing them together. It makes a better seal. However, there are a few spots where twisting can't be done.

Step 2



- Cut PVC as directed.
- 4 - 1 1/2" x 2 1/4"
- 1 - 1 1/2" x 6 1/2"
- 1 - 1 1/2" x 10"
- 1 - 1 1/2" x 3 7/8"
- 1 - 1" x 2 1/2"
- 1 - 1" x 2"
- 3 - 3/4" x 1 1/2"

Step 3



- Lay out pieces to make sure you have everything.
- Dry-fitting the entire project is a great idea. Some pieces may need to be sawed down to fit correctly. Lining up the handle can be tricky.
- Draw guide marks. These will help you know when you've pushed the pipe in far enough, and keep it level.
- Picture 2 shows an example of guide marks.

Step 4



- We will be starting with the bottom and working upwards.
- Remember: PVC glue dries VERY fast.
- You will spread PVC glue around the short pieces and inside the shaped pieces.
- Push and twist together. Make VERY sure that they are all level. If they are not level the rest of the pieces will not fit.
- Quickly after/while inserting the pieces we laid it flat on the table and pushed it flat. This makes sure the whole base is level.

Step 5



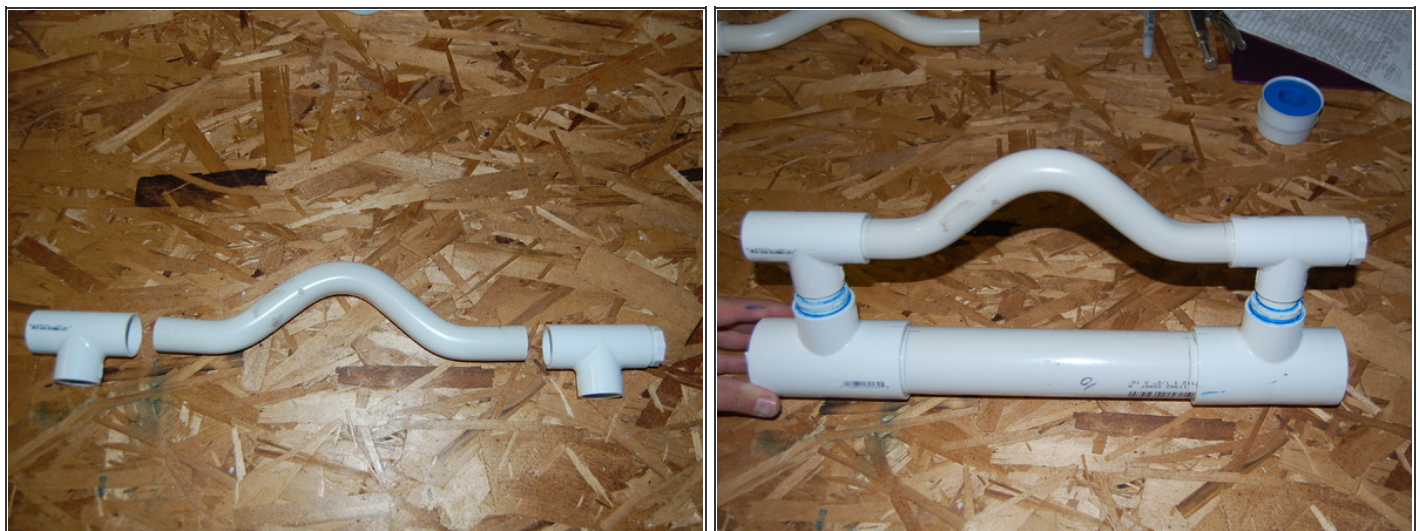
- Using the same method -
- 1 1/2" x 12" one on each side.
- 1 1/2" x 6 1/2" in the center.

Step 6



- Layout (Picture 1)
- Glue the two pieces shown. (Pictures 2 and 3)

Step 7



- Layout
- Glue a piece 1 1/2" x 10" into the two T pieces. Set aside.
- Glue together part of the handle. (Picture 1)
- Glue the two together.

Step 8



- Glue the whole piece into the center piece.

Step 9



- Layout
- Glue together as shown in picture 2.
- Glue whole piece into main piece.

Step 10



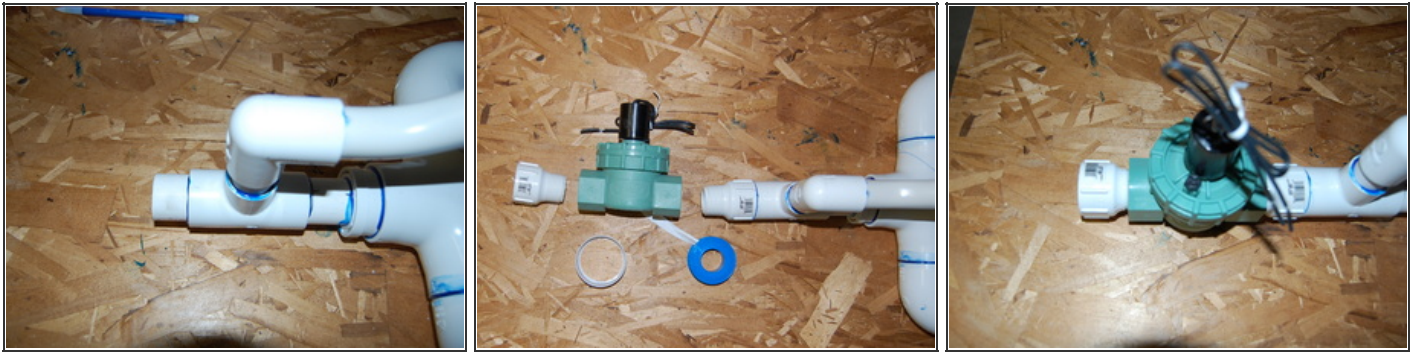
- Layout
- Glue bushing & small piece into top of X piece. (Picture 2)
- Glue the next handle. (Picture 3)

Step 11



- Glue small piece into small elbow. (Picture 1)
- Glue elbow into end of handle. (Picture 2)
- Glue T piece into both small pieces. (Picture 3)

Step 12



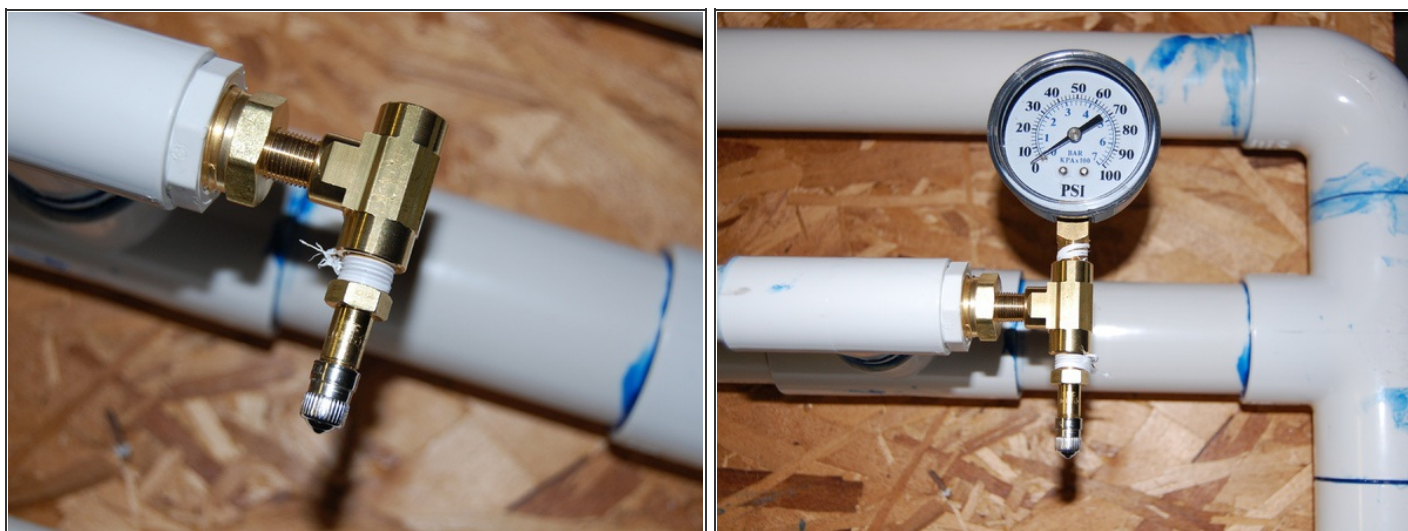
- Glue small piece into end of T (Picture 1).
- Layout
 - Glue pieces as shown (Picture 2).
 - Use PVC tape for all screw fittings.

Step 13



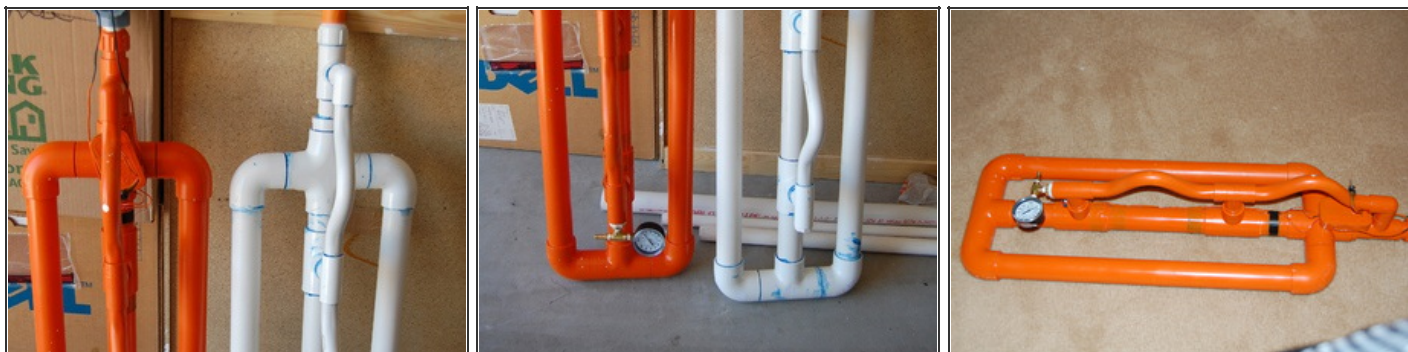
- Other end.
- Glue piece into PVC.
- Screw pieces in as shown. (Pictures 2 & 3)
 - Remember to use PVC tape.

Step 14



- Continue with end assembly.

Step 15



- Before and after paint
- Put a 12" piece of PVC into the top. This is where the marshmallows will be loaded and fired.
- You will need to solder wires from the sprinkler valve, switches and extra wire to battery pack. Hide battery in Altoids can.
- One switch is your safety, the other is the firing switch.
- Load marshmallow. Pump with bike pump to 30 PSI. Flip your safety off and fire. The marshmallows will go far, so make sure you have a safe area to shoot them.
- **WARNING:** Only pump the air cannon to 30PSI. Any more could result in damage to cannon or yourself.



